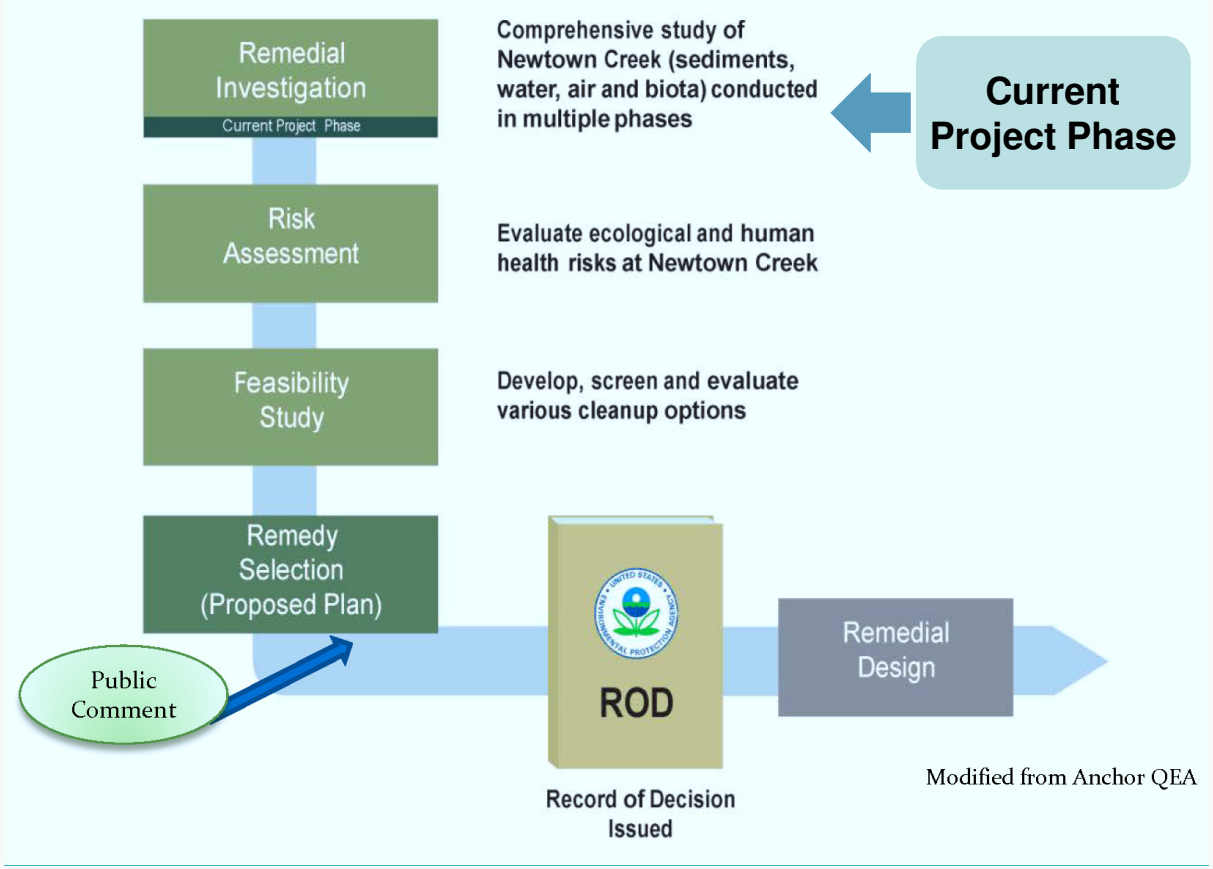
Newtown Creek Superfund Site
Community Advisory Group Meeting
October 1, 2014

Presentation Outline

- Remedial Investigation Overview
- Phase 1 Investigation Summary
- Phase 2 Investigation Update
- Next Steps
- Phase 2 RI Deliverable Schedule
- EPA Contact Information

Remedial Investigation/Feasibility Study Process for Newtown Creek



Remedial Investigation

- Overall objectives
  - To characterize the nature and extent of contamination throughout the Creek
  - To support the Feasibility Study
- Major Tasks
  - Field investigation (two phases – Phase 1 and Phase 2)
  - Sample analysis and data validation/evaluation
  - Nature and extent of contamination
  - Perform human health and ecological risk assessments
  - Remedial investigation report

Phase 1 Remedial Investigation

- Conducted from October 2011 to March 2013
- Objectives:
  - To characterize physical properties
  - To characterize chemical nature of surface water, air and sediment
- Phase 1 Field Activities:

<u>Surveys</u>

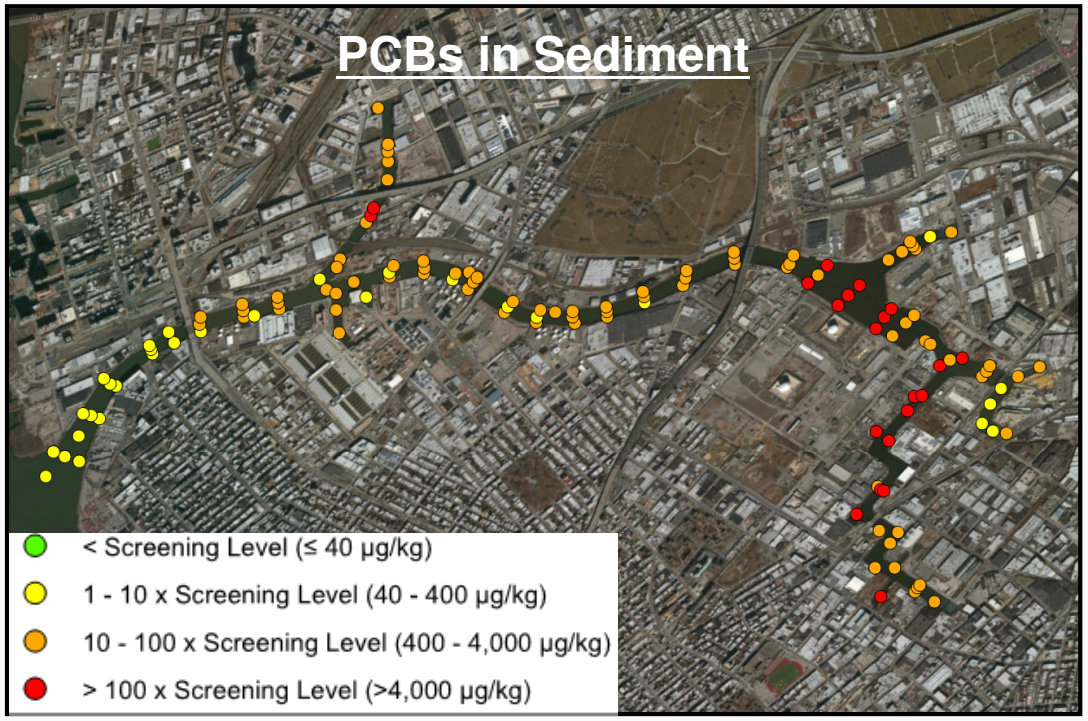
- Shoreline characterization
- Bathymetric
- Geophysical/aerial
- Habitat and wildlife
- Fish/benthic community

<u>Sampling</u>

- Surface Water
- Surface and subsurface sediment
- Air

Summary of Phase 1 RI Results

- Surface water: metals and PAHs present throughout the Creek
- Sediment: contaminated with metals, PCBs & PAHs
- Air: contaminant concentrations in Study Area similar to NYSDEC background levels



Phase 2 Remedial Investigation

- Began in May 2014 and scheduled to be completed in Spring 2015
- Objectives:
  - Fill Phase 1 Data Gaps
  - Estimate current chemical loading to the Creek
- Phase 2 Field Activities:

<u>Surveys</u>

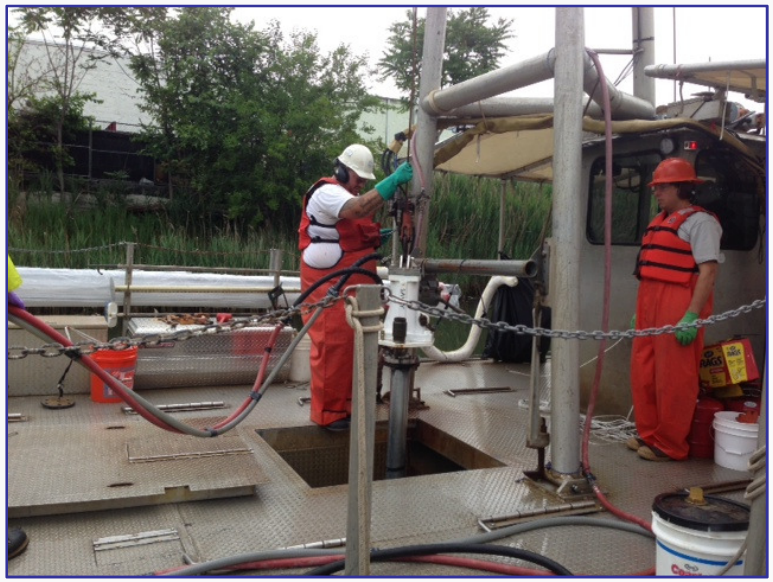
- Surface/subsurface sediment sampling
- Surface water sampling
- Point source sampling
  Groundwater sampling

<u>Risk Assessment Support</u>

- Wildlife/habitat surveys
- Biota sampling
- Benthic community survey
- Caged bivalve study
- Sediment toxicity testing

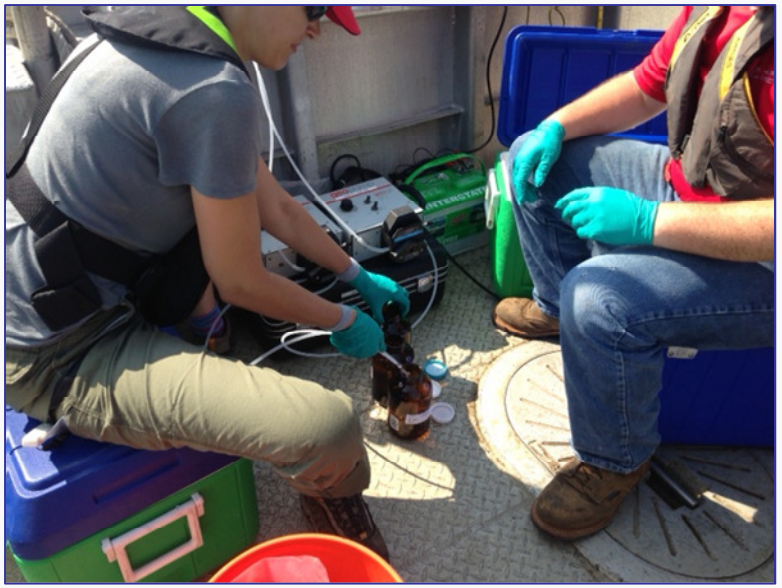
Surface/Subsurface Sediment Sampling

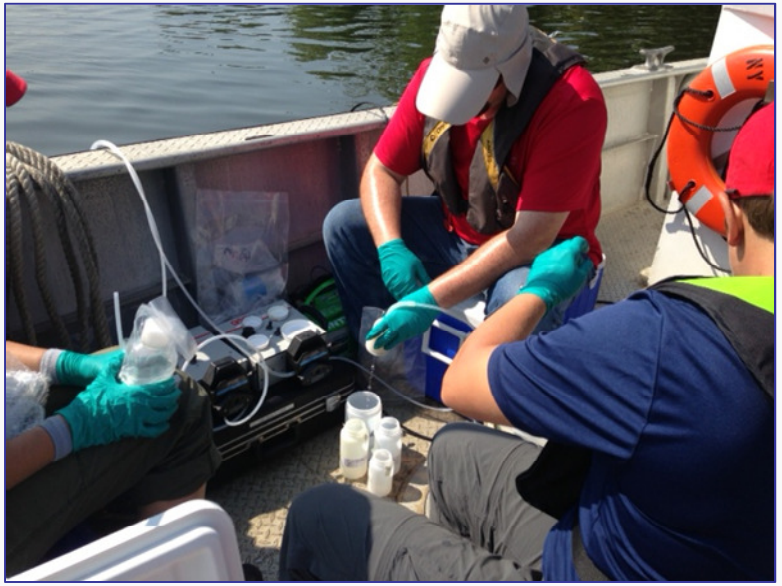
- Focused in key areas identified in Phase 1
- Assess sediment accumulation rate for modeling
- Support human health and ecological risk assessments



Surface Water Sampling

- In-creek sampling during point source discharge events
- Additional sampling and flow measurements to support modeling





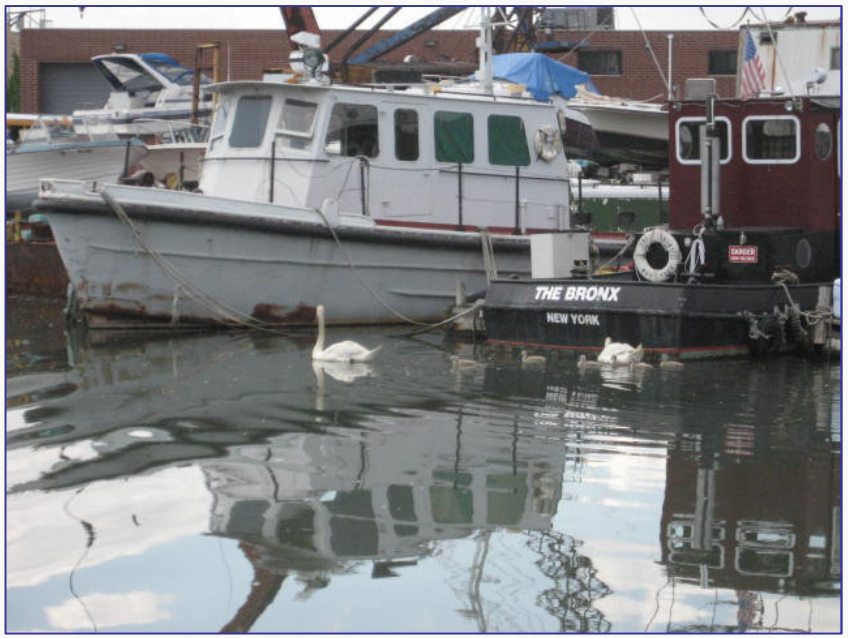
Point Sources Sampling

- Stormwater
- CSO
- Private discharges
- Overland flow

Groundwater Sampling

- Groundwater
  - Monitoring Well
  - Geoprobe
- Porewater
- Seepage Meter
- Sediment (Boring)

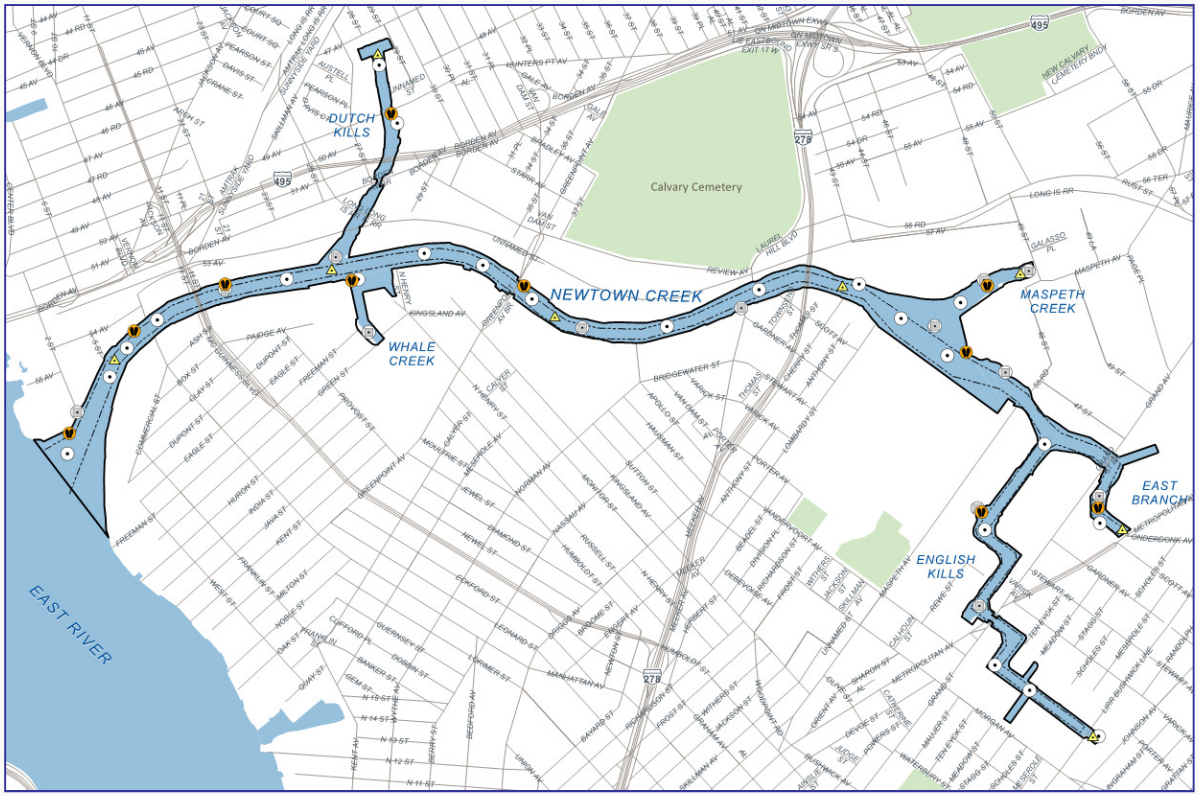
Wildlife/Habitat Survey



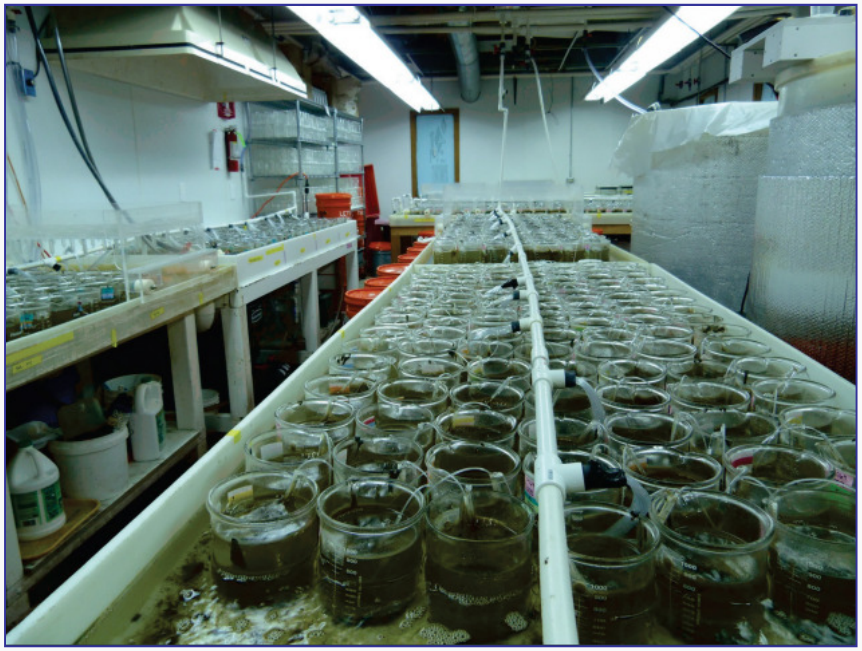
Biota Sampling

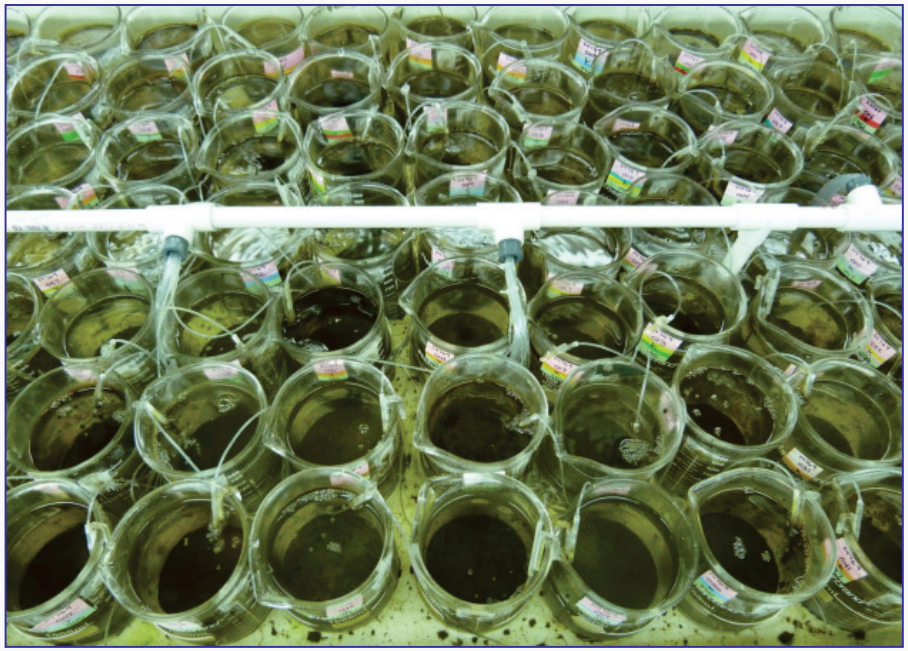
Benthic Community Survey

Caged Bivalve Study



Sediment Toxicity Testing





Next Steps

- Evaluate Phase 1 and Phase 2 investigation data
- Assess risks from exposure to contaminants to human health and the environment
- Prepare the RI report
  - Determine the nature and extent of contamination in the creek
  - Define the fate and transport of identified contaminants

Phase 2 Deliverable Schedule – received from NCG

- Draft Ecological Risk Assessment
  - November 2015
- Draft Human Health Risk Assessment
  - November 2015
- Draft Remedial Investigation Report
  - December 2015

EPA Contact Information

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- **EPA Website for Newtown Creek**
  www.epa.gov/region02/superfund/npl/newtowncreek